# **IGCSE CHEMISTRY - 0620**

## Why should I choose Chemistry?

- Chemistry is fundamental to our world touching almost every aspect of our lives in some way and by studying the nature of chemicals and chemical processes student will gain insights into a variety of physical and biological phenomena.
- Students will increase their understanding of the technological world while developing an interest in the environment and how to care for it.
- Students will develop attitudes relevant to scientific study such as a concern for accuracy and precision, objectivity, integrity, enquiry, initiative and inventiveness.
- They will develop better understand the influence and limitations placed on scientific study by society, economy, technology, ethics, the community and the environment

#### **Course Content:**

The course content is divided into four main sections. The first two sections are covered in Year 10, the second two in Year 11:

- A. **Principles of Chemistry** (The Particulate Nature of Matter, Experimental Techniques, Atoms, Elements and Compounds, Stoichiometry)
- B. **Physical Chemistry** (Electrolysis, Chemical Reactions, Acids, Bases and Salts)
- C. Inorganic Chemistry (The Periodic Table, Metals, Air, Water, Sulfur and Carbonates)
- D. Organic Chemistry (Hydrocarbons, Alkanes, Alkenes, Alcohol and Carboxylic acids, Polymers)

#### How will I learn?

A variety of teaching and learning methods are used throughout the course which include practical work, demonstrations, presentations, virtual and interactive simulations, animations and computer assessments including self-assessment.

### How will I be assessed?

You will be assessed by two papers that test your understanding of the content covered: one multiple-choice (45 minutes and worth 30% of the total marks) and one extended written paper (75 minutes and 50% of the total); and an alternative to practical paper (60 minutes and 20% of the total) that tests the practical elements of the course.